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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,652	11/15/2001	Yasutaka Nagaoka	Q67305	7453

7590 03/12/2004

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EXAMINER

MCCALL, ERIC SCOTT

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/987,652	Applicant(s) NAGAOKA ET AL.	
	Examiner Eric S. McCall	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

STRUCTURE FOR MOUNTING STEERING
ANGLE SENSOR FOR STEERING

NON-FINAL OFFICE ACTION

In response to the Applicant's request for continued examination and amendment dated Dec. 18, 2003.

CLAIMS

35 U.S.C. § 112

In response to the Applicant's amendments/arguments, the rejection of claims 1-7 under 35 U.S.C. 112, first paragraph, as set forth in the previous office action has been overcome.

35 U.S.C. § 102

In view of the Applicant's amendments, the rejection of claims 1-7 under 35 U.S.C. 102(b) as being anticipated by Hoshino et al. (4,683,375) as set forth in the previous office action has been overcome.

However, the following now applies:

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino et al. (4,683,375) in view of Masuda (5,971,782).

With respect to independent claims 1 and 4, Hoshino et al. teach a structure for mounting a steering angle sensor of a steering wheel (fig. 3), wherein

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a column (20) including a through-hole (area for shaft, 12, to pass through) extending along a longitudinal axis of said column (fig. 3), said column including top and bottom surfaces through which said longitudinal axis passes, and at least one side surface (fig. 1),

wherein a steering-signal transmitting unit (the wire/connector coming from sensor, 16, as shown in fig. 2), an inherent turn signal lever, and an inherent wiper control switch lever are attached to the column (the mounting of the turn signal lever and the wiper control switch lever are inherently at the upper portion of the steering column in order to be within the operator's reach as is very well known and very common in the art), and

wherein a fitting recessed portion (area which accepts sensor 16) is provided in the side surface of the column and a steering angle sensor (16) is inserted and fitted into the fitting recessed portion from the direction of the side surface of the column (fig. 3).

However, Hoshino et al. fail to teach the fitting recessed portion being substantially adjacent to the turn signal lever and wiper control switch lever such that the steering-signal transmitting unit, the turn signal lever, and the wiper control switch lever are attached to the column in a way to form a "lever unit" as claimed.

On the other hand, Masuda, as was previously cited by the Examiner, does teach (Fig. 1) the steering-signal transmitting unit, the turn signal lever, and the wiper control switch lever all substantially adjacent to one another and thus could be interpreted as a "lever unit" as claimed by the Applicant.

As such, it would have been obvious to one having ordinary skill in the art armed with said teachings to move the side-surface mounting location of the steering-signal transmitting unit as taught by Hoshino et al. to the location as taught by Masuda.

The motivation being to incorporate everything in the “column switch” (21) as taught by Masuda in order to package all of the controls in one specific spot for ease of accessibility and repair.

With respect to dependent claims 2, 3, 5, and 6, Hoshino et al. suggest the claimed subject matter thereof (Figs 3 & 4).

With respect to dependent claim 7, the claimed subject matter thereof is inherent in the teaching of Hoshino et al. but nonetheless explicitly taught by Masuda.

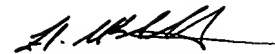
Response to Arguments

In response to the Applicant’s arguments, said arguments were found to be persuasive in view of the Applicant’s concurring amendments. However, the Applicant’s claims have not been found to be allowable over the prior art, and the amendments thereof necessitated the change in the grounds of rejection.

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CONCLUSION

Any inquiry concerning this communication should be directed to Eric S. McCall at telephone number (571) 272-2183.



Eric S. McCall
Primary Examiner
Art Unit 2855
March 08, 2004